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Jennifer D. Gaines
Jennifer Gaines

PATENT
Atty. Docket No. 37369-8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

HELEN BRAVEN, ET AL.

Application No.: 10/506,958

Filing Date: May 2, 2005

Based on International Application No.: PCT/GB03/00613

For: NUCLEIC ACID PROBES, THEIR SYNTHESIS AND USE

Group Art Unit: 1645

Examiner: To Be Assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.99, Applicants bring to the attention of the Examiner the references identified on the attached Forms PTO/SB/08a and PTO/SB/08b which the Examiner may consider to be material to examination of the subject application.

In accordance with 37 CFR §1.98, as amended, no copies of any cited issued patents or pending applications are enclosed. Applicants respectfully request that the Examiner consider the cited references and evidence that consideration by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the cited documents constitute "prior art". Applicant reserves the right to present to the Patent and Trademark Office relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the cited references, should one or more of the references be applied against the claims of the present application.

As this submission is being made prior to the first Office Action on the merits, it is believed that no fees are due in connection herewith. If there are any additional fees due in connection with the filing of this paper that have not been accounted for in this paper or in the accompanying papers, please charge the fees to Deposit Account No. 13-3735. If an extension of time under 37 C.F.R. §1.136 is required for the filing of this paper and is not accounted for in this paper or the accompanying papers, such an extension is requested and the fee (or any underpayment thereof) should also be charged to the Deposit Account. A duplicate copy of this page is enclosed for that purpose.

Dated: October 11, 2005

Respectfully submitted,
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PTO/SB/08a (07-05)
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	10/506,958
Filing Date	May 2, 2005
First Named Inventor	Helen Braven, et al.
Art Unit	1645
Examiner Name	To Be Assigned
Attorney Docket Number	37369-8

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-5,837,450	11/17/1998	Dahlberg, et al.	
	2	US-5,795,763	08/18/1998	Dahlberg, et al.	
	3	US-5,614,402	03/25/1997	Dahlberg, et al.	
	4	US-5,487,972	01/30/1996	Gelfand, et al.	
	5	US-5,804,375	09/08/1998	Gelfand, et al.	
	6	US-5,538,848	07/23/1996	Livak, et al.	
	7	US-5,591,578	01/07/1997	Meade, et al.	
	8	US-5,705,348	01/06/1998	Meade, et al.	
	9	US-5,312,527	05/17/1994	Mikkelsen, et al.	
	10	US-4,840,893	06/20/1989	Hill, et al.	
	11	US-5,871,918	02/16/1999	Thorpe, et al.	
	12	US-6,221,586	04/24/2001	Barton, et al.	
	13	US-5,846,717	12/08/1998	Brow, et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3] "Number[4] "Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[5]
	14	WO 00/32813	06/08/2000	Willner, et al.		

Examiner Signature		Date Considered	

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

Complete if Known	
Application Number	10/506,958
Filing Date	May 2, 2005
First Named Inventor	Helen Braven, et al.
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	15	Wang, J. et al., "Electrochemical Measurements of Oligonucleotides in the Presence of Chromosomal DNA Using Membrance-Covered Carbon Electrodes", Analytical Chemistry, Vol. 69. No. 19. October 1. 1997. pp 4056-4059.	
	16	Berney, H. et al., "A DNA Diagnostic Biosensor: Development, Characterisation and Performance", Sensors and Actuators, B 68, 2000, pp. 100-108.	
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	22	Mikkelson, S., "Electrochemical Biosensors for DNA Sequence Detection", Electroanalysis, Vol. 8, No. 1, 1996, pp. 15-19.	
	23	Wang, J. et al., "DNA Electrochemical Biosensor for the Detection of Short DNA Sequences Related to the Human Immunodeficiency Virus", Analytical Chemistry, Vol 68, No. 15, August 1. 1996. pp. 2629-2634.	
	24	Wang, J. et al., "Peptide Nucleic Acid Probes for Sequence-Specific DNA Biosensors", Journal of American Chemical Society, Vol. 118, No. 33, 1996, pp. 7667-7670.	

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Sheet 3 of 4

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Attorney Docket Number	37369-8

NON PATENT LITERATURE DOCUMENTS

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	25	Palecek, E. et al., Detecting DNA Hybridization and Damage", Analytical Chemistry, February 1, 2001, pp. 75-83.	
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	29	Boon, E. et al., Mutation Detection by Electrocatalysis at DNA-Modified Electrodes", Nature Biology, Vol. 18, October 200o, pp. 1096-1100.	
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	31	Patolsky, F. et al., "Detection of Single-Base DNA Mutations by Enzyme-Amplified Electronic Transduction", Nature Biotechnology, Vol. 19, March 2001, pp. 253-257.	
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	35	Ihara, T. et al., "Ferrocene-Oligonucleotide Conjugates for Electrochemical Probing of DNA", Nucleic Acids Research, Vol. 24, No. 21, 1996, pp. 4273-4280.	
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	37	Tierney, M. et al., "Synthesis and Characterization of Flourenone-, Anthraquinone-, and Phenothiazine-Labeled Oligodeoxynucleotides: 5'-Probes for DNA Redox Chemistry", J. Org. Chem., Vol. 65, 2000, pp. 5355-5359.	
	38	Whittemore, N. et al., "Synthesis and Electrochemistry of Anthraquinone-Oligodeoxynucleotide Conjugates", Bioconjugate Chem., Vol. 10, No. 2, 1999, pp. 261-270.	
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	43	Beilstein, A. et al., "Synthesis and Characterization of Ferrocene-Labeled Oligodeoxynucleotides", Journal of Oragnometallic Chemistry, Vol. 637-639, 2001, pp. 398-406.	

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